"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

S/076/62/036/008/008/011
B101/B144

AUTHOR: Dubinin, M. M.

TITLE: Specific surface of fine-pored adsorbents. I. Estimation of the formal geometric surface of alumosilicate skeletons in dehydrated crystals of synthetic A-type and X-type zeolites

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 8, 1962, 1806 - 1809

TEXT: The surface area of the elementary cell of dehydrated zeolites, hence the specific surface per unit mass, are calculated on the basis of Western X-ray diffraction studies (see below). For A-type zeolite it is assumed that the elementary cell contains a large cavity of diameter d_1 and a small cavity d_{sm}. It is found for the surface:
$s_{1+sm} = \pi(d_{co}^2 - \frac{3}{2}d_4^2 + 3d_4 l + d_{sm}^2)$, where d_{co} is the diameter of the cubo-octahedron, d_4 the diameter and l the length of the four-membered oxygen bridges assumed to be cylindrical, which connect the octahedron with its neighbor octahedra. For X-type zeolite:

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Specific surface of...

$s_{1+sm} = 8\pi(d_{co}^2 - d_6^2 + 2d_6 l + d_{sm}^2)$, where d_6 is the diameter of the six-membered oxygen bridges. For both A-type and X-type zeolites this gives specific surfaces of ~1000 m^2/g for the large cavities and of ~1500m^2/g for the large plus small cavities. A comparison of this estimation with data obtained by adsorption is to follow. There is 1 table. The most important English-language references are: D. W. Breck, W. G. Eversole, R. M. Milton, T. B. Reed, A. L. Thomas, J. Amer. Chem. Soc., 78, 5963, 1956; T. B. Reed, D. W. Breck, J. Amer. Chem. Soc., 78, 5972, 1956; R. M. Barrer, W. M. Meier, Trans. Faraday Soc., 54, 1074, 1958; R. M. Barrer, P. W. Bultitude, J. W. Sutherland, Trans. Faraday Soc., 53, 1111, 1957; L. Broussard, D. P. Shoemaker, J. Amer. Chem. Soc., 82, 1041, 1960.

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskoy khimii (Academy of Sciences USSR, Institute of Physical Chemistry)

SUBMITTED: December 29, 1961

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M., inzh.; GLADKIKH, P.A.

"Piston compressors" by M.I.Frenkel'. Reviewed by M.M.Dubinin, P.A.Gladkikh. Vest.mashinostr. 42 no.11:89 N '62. (MIRA 15:11)
(Air compressors) (Frenkel', M.I.)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

38130
S/020/62/144/003/028/030
B124/B101

15.2050

AUTHORS: Tager, A. A., Tsilipotkina, M. V., Romanova, D. M., and Dubinin, M. M., Academician

TITLE: On microporous structure formation in the process of thermal degradation of Saran

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 3, 1962, 602-605

TEXT: The microporosity of active carbons obtained in the course of the thermal degradation of Saran (a copolymer of 85% vinylidene chloride and 15% vinyl chloride) was studied at temperatures between 170 and 700°C. The weight loss of Saran on heating was assumed to be equal to the weight of HCl evolved. The nitrogen adsorption isotherms of the material previously heated to various temperatures were measured at -195°C by a volumetric method and those of benzene at 24°C by a gravimetric method. The isotherms obtained for the products of thermally treated Saran are typical of molecular-sieve-type, finely porous absorbents; the limiting values of nitrogen adsorption for the sample C-700 (heated to 700°C) being 3.6 times higher than those of benzene adsorption. The structural

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

45147

5.1105

S/076/63/037/002/013/018
B144/B180

AUTHORS: Dubinin, M. M., Zhukovskaya, Ye. G., Murdmaa, K. O. (Moscow)

TITLE: Specific surface area of finely-porous adsorbents. II. Uselessness of adsorption methods for determining the specific surface area of finely-porous adsorbents

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 2, 1963, 426-432

TEXT: Based on previous work (Zh. fiz. khimii, 36, 1806, 1962) the adsorption isotherms on fully dehydrated synthetic CaA, NaX and CaX zeolite crystals were determined for nitrogen vapors at -195°C and for water at 20°C. The specific surface area values derived from the BET and Langmuir adsorption isotherm equations were similar. The specific surface areas were also calculated from the formulas $S = a_m N\omega$, where a_m is the capacity of the monolayer and N the Avogadro number, and $\omega = 4 \cdot 0.866 \, (M/4\sqrt{2}N\varrho)^{2/3}$, where M is the molecular weight and ϱ the volume density of the liquid phase. ω was 16.2 Å for nitrogen and 10.3 Å

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

Dubinin, M. M.

PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

Card 1/22 4

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

Foreword 3

Dubinin, M. M. Introduction 5

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APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

Synthetic Zeolites: (Cont.) SOV/6246

THEORETICAL PROBLEMS OF ADSORPTION ON ZEOLITES. METHODS OF INVESTIGATION

Dubinin, M. M., Z. A. Zhukova, and N. V. Kel'tsev. Applicability of the Potential Theory to the Adsorption of Gases and Vapors by Synthetic Zeolites 7

Bering, B. P., V. V. Serpinskiy. Adsorption Isosteres for Synthetic Zeolites Within the Framework of the Potential Theory 18

Timofeyev, D. P., O. N. Kabanova, I. T. Yerashko, and A. S. Ponomarev. The Role of the Secondary Porosity of Zeolites in the Kinetics of Water-Vapor Sorption 24

Misin, M. S., B. V. Adrianova, and M. N. Adrianov. Investigation of the Adsorption and Kinetic Properties of Granular Zeolites With the Aid of Thoron 31

Card 3/[illegible] 4

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

Synthetic Zeolites: (Cont.) SOV/6246

Andronikashvili, T. G., and Sh. D. Sabelashvili. Gas Absorption Chromatography on Synthetic Zeolites 65

Zhdanov, S. P., L. S. Yastrebova, Ye. V. Koroml'di. Porous Glasses as Molecular Sieves 68

Dobychin, D. P., T. M. Burkat, N. N. Kiseleva. Porous Glasses as Absorbents of the Molecular Sieve Type 75

Dubinin, M. M. The Composition of Cubic Octahedral Structural Units of Synthetic Zeolites 86

Aleskovskiy, B. V. The Possibility of Obtaining Absorbents of the Molecular Sieve Type of Leaching 91

Mirskiy, Ya. V., and M. G. Mitrofanov. Adsorption of Hydrocarbon Vapors by Synthetic Zeolites at High Temperatures 94

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APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M.

Adsorption properties and the secondary porous structure of adsorbents having molecular sieve action. Report No.8: Improvement of the computation method based on the X-ray diffraction data on the volumes of large cavities of dehydrated crystals of X-type synthetic zeolites. Izv.AN SSSR.Ser.khim. no.2:209-215 F '64. (MIRA 17:3)

1. Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M., akademik; ZHUKOVSKAYA, Ye.G.

Characteristics of the adsorption of vapors by microporous adsorbents. Dokl. AN SSSR 156 no. 2:404-407 My '64.
(MIRA 17:7)

1. Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

VASIL'YEVA, O.A.; GOLUBEVA, L.G.; DUBININ, M.M.; YEGOROVA, Ye.N.; SHISHAKOVA, T.N.; UL'KO, N.G.

Adsorption properties and maximum adsorption volumes of synthetic zeolites of types A and Y. Zhur. prikl. khim. 37 no.10:2158-2165 O '64. (MIRA 17:11)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M.; GORBACHEV, S.V.; POLUKAROV, Yu.M.; CHMUTOV, K.V.

Scientific activity of professor Kseniia Mikhailovna Gorbunova, doctor of chemical sciences; 1904-; on her sixtieth birthday. Zhur.fiz.khim. 38 no.8:2174-2115 Ag '64. (MIRA 18:3)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M., akademik

Molecular sieve properties of A, X, and Y-type synthetic zeolites and different ion-exchange forms. Dokl. AN SSSR 159 no.1:166-169 N '64. (MIRA 17:12)

1. Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

FEDOROV, V.M.; GLAZUN, B.A.; ZHILINKOV, I.V.; DUBININ, M.M.

Dielectric properties of water adsorbed by zeolites. Report No.1: Dielectric losses in the system Na& zeolite crystals - water at low primings. Izv. AN SSSR Ser. khim. no.11:1930-1934 N '64 (MIRA 18:1)

1. Voronezhskiy sel'skokhozyaystvennyy institut i Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

ZUKAL, A.; DUBININ, M.M.; KADLETS, O. [Kadlec, O.]; PLACHENOV, T.G. [Placenov, T.]; POLAK, R.

Characteristics of the porous structure of active coals obtained by various methods. Zhur. fiz. khim. 39 no.5:1198-1205 My '65. (MIRA 18:8)

1. Institut fizicheskoy khimii AN Chekhoslovatskoy Sotsialisticheskoy Respubliki, Praga.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

L 1125-66 EWT(m)/T

ACCESSION NR: AP5022938 UR/0062/65/000/008/1500/1502
541.183+546.284

AUTHOR: Dubinin, M. M.; Zhukovskaya, Ye. G.; Luk'yanovich, V. M.; Murdmaa, K. O.; Polstyanov, Ye. F.; Senderov, E. E.

TITLE: Adsorption volumes of synthetic mordenites

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 8, 1965, 1500-1502

TOPIC TAGS: molecular sieve, synthetic zeolite, mordenite

ABSTRACT: Adsorption (pore) volumes of sodium and hydrogen forms of synthetic mordenite were determined in order to check them against the corresponding values calculated on the basis of X-ray analysis. For comparison, also H-Zeolon (product of Norton Company) was examined. The saturation volumes of Na and H synthetic mordenites were determined from water vapor isotherm at 20°C, nitrogen and argon isotherms taken at -196°C, and from sorption and desorption isotherms for benzene taken at 20°C and various pressures. For all mordenites an excellent agreement was found between the calculated pore volumes and the values obtained from water vapor, nitrogen, and argon adsorption measurements, while benzene adsorption gave values for the pore volumes that were too low. This was due to the fact that the small cavities in the

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L 1125-66

ACCESSION NR: AP5022938

6

mordenite tube-like channels were inaccessible to benzene. It was concluded that only the channels with openings made of oxygen rings containing 12 atoms are accessible to benzene. Orig. art. has: 2 figures, 2 tables.

44,55

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences, SSSR); Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 17Dec64 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 004 OTHER: 003

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

ACC NR: AP5024950 UR/0065/000/010/0032/0034
543.544

AUTHOR: Piguzova, L. I.; Nikolina, V. Ya.; Dubinin, M. M.; Shishakova, T. N.

TITLE: Acid resistance of the synthetic zeolite erionite

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 10, 1965, 32-34

TOPIC TAGS: zeolite, hydrochloric acid, gas adsorption, adsorption, desorption

ABSTRACT: Synthetic erionite, having the formula $0.5K_2O \cdot 0.4Na_2O \cdot Al_2O_3 \cdot 6.6SiO_2 \cdot 5.5H_2O$, was treated with solutions of hydrochloric acid of various concentrations for 1 hr at 96 — 98C. It was found that under drastic conditions (acid of pH 2.1 — 2.4), the structure of the zeolite remains preserved. No changes in the crystal lattice of the zeolite, even when treated with 0.1 N HCl, could be detected by x-ray structural analysis. The water adsorption capacity also changed very little. The synthetic zeolite in the H-form was studied under stationary conditions of the adsorption-desorption of an NO_2-N_2O_4 gas mixture after 4 adsorption cycles, no significant change in adsorption properties was observed. Very slight amounts of benzene adsorbed on synthetic erionite showed that its effective por radius is about 5A. "The NO_2 — N_2O_4 adsorption-desorption experiments were carried out at the Kazan khimiko-tekhnologicheskiy institut im. S. M. Kirova (Kazan Chemical Engineering Institute) by E. B. Krasnyy and [illegible] Mushin, who used a technique which they developed." Orig. art. has 5 figures and 1 table.

ASSOCIATION: VNII NP

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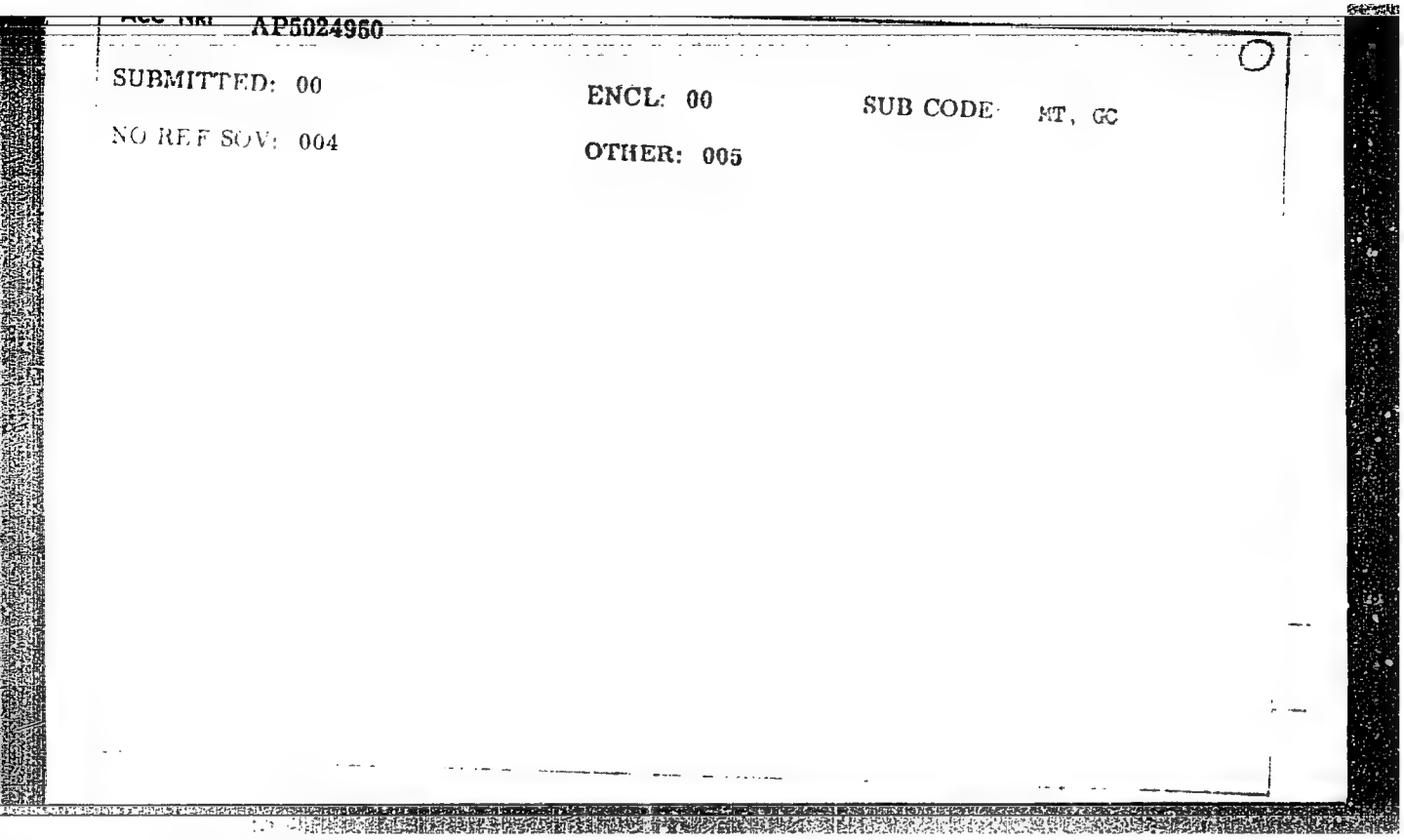

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M.; BEREZKINA, Yu.F.; KOLSTYANOV, Yu.F.; KYARIGINA, Z.A.; SARAKHOV, A.I.

Adsorption properties and the secondary porous structure of adsorbents having molecular-sieve action. Report No.11: Specific surface of secondary pores of molded type-A synthetic zeolites. Izv. AN SSSR.Ser.khim. no.10:1731-1740 '65.

(MIRA 18:10)

1. Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M.

Present state of the theory of volume filling of microporous adsorbents during the adsorption of gases and vapors on carbon adsorbents. Zhur. fiz. khim. 39 no.6:1305-1317 Je '65. (MIRA 18:11)

1. Institut fizicheskoy khimii AN SSSR. Submitted Feb. 19, 1965.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

CZECHOSLOVAKIA

DUBININ, M.M.; KADLEC, O.; ZUKAL, A.

1. Institute of Physical Chemistry, USSR Academy of Sciences, Moscow (for Dubinin?); 2. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague (for Kadlec and Zukal?)

Prague, collection of Czechoslovak Chemical Communications, No 2, Feb 1966, pp 406-414

"Adsorption equilibria of water on NaX zeolite."

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

IZOTOVA, T.I.; DUBININ, M.M.

Microporous structure of active carbon. Zhur.fiz.khim. 39 no.11:2796-2803 N '65. (MIRA 18:12)

1. Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

L 20304-66 EWT(1)/EWT(m)/T

ACC NR: AP6012076 SOURCE CODE: UR/0062/65/000/010/1731/1740

AUTHOR: Dubinin, M. M.; Berezkina, Yu. F.; Polstyanov, Ye. F.; Ryabikova, Z. A.; Sarakhov, A. I. 36 32 B

ORG: Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Study of the adsorption properties and secondary porous structure of adsorbents having molecular-sieve action. Report 11. Specific surface of secondary pores of molded synthetic zeolites, type A

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1965, 1731-1740

TOPIC TAGS: adsorption, zeolite, porosity, molecular sieve

ABSTRACT: The analysis of the physical content of various methods of determining the specific surface of the secondary pores of formed zeolites is presented. The specific surface of secondary pores of an equivalent sorbent model with an accepted geometric form of the pores can be calculated from experiments on the depression of mercury and the capillary condensation of benzene. By using a highly sensitive weight adsorption device the specific surfaces, close to actual, of secondary pores of formed Type A zeolites and external surfaces of the zeolite crystals contained in them are determined. The specific surfaces of the secondary pores of the formed zeolites are determined mainly by the porous structure of additives of the binding substances. The specific surfaces of the secondary pores for equivalent porus sor-

Card 1/2 UDC: 541.18+661.183

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

bent models as a rule are considerably greater than the actual specific surfaces of the secondary pores of real formed zeolites. Hence methods of depression of mercury and capillary condensation of vapors cannot serve as any accurate estimation of the specific surfaces of secondary pores of the formed zeolites. The authors thank B. A. Lipkind, T. G. Plachenov and Ya. V. Mirskiy for making available for research the samples of crystalline and formed zeolites. Orig. art. has: 6 figures, 7 formulas, and 3 tables. [JPRS]

SUB CODE: 07, 11 / SUBM DATE: 17Jul63 / ORIG REF: 012 / OTH REF: 001

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

L 26553-66 EWT(m)/T

ACC NR: AP6017357 SOURCE CODE: UR/0062/66/000/003/0393/0398

AUTHOR: Glazun, B. A.; Fedorov, V. M.; Dubinin, M. M.; Zhilenkov, I. V.

ORG: Voronezh Agricultural Institute (Voronezhskiy sel'skokhozyaystvennyy institut); Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Investigation of the dielectric properties of water absorbed by zeolites. Report 2. Low-temperature relaxation in the crystalline system, NaA zeolite-water with low fillings

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 3, 1966, 393-398

TOPIC TAGS: zeolite, dielectric property

ABSTRACT: The dielectric behavior of NaA zeolite crystals with low water fillings was studied at frequencies of 10^5-10^7 cps in the 90-250°K range. Two relaxation processes are observable. One of them corresponds to relaxers which are present in the dehydrated zeolite, and is suppressed with an increase in the content of adsorbed water. The other process is apparently associated with the relaxation of the adsorbed water molecules themselves. An attempt was made, based on dielectric measurements, to estimate the number of the most active sites in the zeolite. The authors thank Ya. V. Mirskiy for presenting the zeolite specimen for study. Orig. art. has: 5 figures. [JPRS]

SUB CODE: 20, 07 / SUBM DATE: 05Nov63 / ORIG REF: 006 / OTH REF: 004

Card 1/1 UDC: 541.183+541.67

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

SOURCE CODE: UR/0062/66/000/009/1507/1513

AUTHOR: Dubinin, M. M.; Polstyanov, Ye. F.

ORG: Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii, AN SSSR)

TITLE: Adsorption properties of carbon adsorbents. Communication 8. Isosteres and isosteric heats of adsorption of vapors on activated charcoals with various microporous structures

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 9, 1966, 1507-1513

TOPIC TAGS: heat of activation, activated carbon

SUB CODE: 07

ABSTRACT: The adsorption isoteres and isosteric differential heats of adsorption of benzene, cyclohexane, and pyridine vapors on activated charcoals were analyzed. In the case of equilibrium adsorption of vapors on activated charcoals, the adsorption isosteres are expressed with a high degree of accuracy as straight lines for a broad range of fillings of the volume of the adsorption space. The curves of the differential heats of adsorption as a function of the parameters of the microporous structure of the activated charcoal and nature of the substance to be adsorbed were analyzed. In the case of adsorption due chiefly to a dispersion interaction, the ratios of the differential heats of

Card 1/2

UDC: 541.183

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

ACC NR: AP7013132

adsorption to the heats of condensation for the investigated vapors are practically constant within a broad range of filling of the volume of the adsorption space. The differential heats of adsorption calculated according to the adsorption equation are in satisfactory agreement with the heats determined according to the adsorption isosteres, the discrepancies not exceeding 5%. Orig. art. has: 9 figures, 15 formulas and 1 table. [JPRS: 40,422]

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

ACC NR: AP7012432 SOURCE CODE: UR/0062/66/000/010/1869/1869

AUTHOR: Bakayev, V. A.; Dubinin, M. M.

ORG: Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Nuclear magnetic resonance signal of lithium in dehydrated synthetic zeolite

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1966, 1869

TOPIC TAGS: ion exchange, nuclear magnetic resonance, lithium, zeolite

SUB CODE: 07,08

ABSTRACT: The authors present the nuclear magnetic resonance signal for two specimens of LiA zeolite produced by ion exchange from NaA zeolite synthesized in different laboratories. The degrees of ion exchange were 98.7 and 98.3% respectively. The specimens were pressed at 780 atm into tablets 8 mm in diameter and dried in vacuum for ten hours at 430°C. The resultant NMR signal, which was identical for both specimens, is shown in the figure. The signal was taken at room temperature on a frequency of 18.3 Mc with a modulation frequency of 180 cps and a synchronous detector time constant of 9 sec. The authors thank V. BOBACHEK and V. V. SERPINSKIY for assistance.

Card 1/2 UDC: 541.183+538.27

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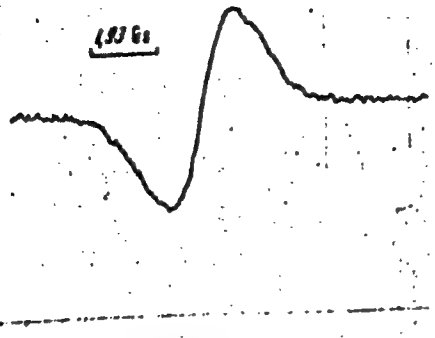
ACC NR: AP7012432



Orig. art. has: 1 figure. [JPRS: 40,427]

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

ACC NR: AP7012438 SOURCE CODE: UR/0020/66/171/002/0382/0384

AUTHOR: Lezin, Yu. S.; Dubinin, M. M. (Academician)

ORG: Institute of Physical Chemistry AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Kinetics of the sorption of water on zeolites

SOURCE: AN SSSR. Doklady, v. 171, no. 2, 1966, 382-384

TOPIC TAGS: adsorption, zeolite, water vapor

SUB CODE: 07

ABSTRACT: In describing the kinetics of the sorption process with allowance for external and internal diffusion, it is assumed that the rate of absorption is proportional to the difference between the local concentration in gas C (kg/m^3) and concentration $\varphi(a)$, in equilibrium with the sorbent at the given extent of packing a (kg/m^3). The coefficient of proportionality β (second $^{-1}$) will depend on the constants of external diffusion β_1 and of internal diffusion β_2

$$da/dt = \beta[C - \varphi(a)].$$

The value of the constant rate of external diffusion changes with the ve-

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ACC NR: AP7012438

locity of the current, but does not depend on the amount of sorbed substance and can be readily determined from criterial equations for external mass transfer.

The value of the constant β_2 depends on the specifics of adsorption of water vapor on zeolite. Orig. art. has: 1 figure and 8 formulas. [JPRS: 40,422]

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

ACC NR: AP7006025 SOURCE CODE: UR/0062/66/000/007/1129/1135

AUTHOR: Fedorov, V. M.; Glazun, B. A.; Dubinin, M. M.; Zhilenkov, I. V.

ORG: Voronezh Agricultural Institute (Voronezhskiy sel'skokhozyaystvennyy institut); Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Investigation of the dielectric properties of water adsorbed by zeolites. Communication 3. Dielectric losses in the system NaA zeolite crystal — water at average degrees of filling

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 7, 1966, 1129-1135

TOPIC TAGS: zeolite, adsorption, dielectric property, dielectric permeability

ABSTRACT: New results of an investigation of NaA zeolite with a water content of 40% of the maximum adsorbable amount are discussed. Construction of the dielectric isotherm (dependence of the static dielectric permeability on the value of the adsorption at constant temperature) and a study of the variation of the parameter 1 - alpha, characterizing the distribution of energies of the active centers, permitted conclusions on the finer subdivision of the active centers determining the relaxation of adsorbed water molecules. Dielectric losses at low frequencies were found to occur in the temperature region from -40 to +20° in NaA zeolite containing water. The dielectric adsorption isotherm had a break at a water content in the zeolite

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ACC NR: AP7006025

corresponding to approximately five to seven molecules per unit cell, evidently due to the structuration of water with increasing adsorption and to the different sorbability on sodium ions bonded to eight-membered and six-membered oxygen rings. A distribution of relaxation times was observed in the region of losses considered, probably due to the energetic heterogeneity of the active centers. The region of distribution became narrower with increasing water content, which indicates development of the structure. The activation energy and entropy of activation for polarization in an electric field increased with increasing water content of over 5%. Measurements of the free energy of formation, together with the break on the dielectric adsorption isotherm indicated that there is a sharp change in the dielectric properties of the adsorbed water at a degree of filling of 20%. The zeolites NaA-I and NaA-II possessed different values of the dielectric permeability eta at identical temperatures and degrees of filling, which is evidently due to differences in the mode of their manufacture. In spite of these differences, the same patterns were observed in both samples. The authors thank Ya. V. Mirskiy and B. A. Lipkind for providing zeolite samples for analysis. Orig. art. has: 3 figures, 3 formulas and 1 table. [JPRS: 38,967]

SUB CODE: 07, 20 / SUBM DATE: 26Feb64 / ORIG REF: 008 / OTH REF: 008

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N. (g.Cheremkhovo); BELOV, A.; PETROV, V.

Readers letters. Sov.shakht. 10 no.5:36-37 My '61. (MIRA 14:9)

1. Rabochiy shakhty "Nezhdannaya," kombinat Rostovugol' (for Belov).
2. Mashinist elektrovoz shakhty no.1 "Pesochenskoy" Tul'skogo sovnarkhoza (for Petrov).

(Coal miners)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

1. DUBININ, M.; FEDOTOV, N.

2. USSR (600)

4. Shaft Sinking

7. Continuous work schedule for sinking vertical shafts. Ugol'. 27, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.; CHUSOV, P.

Manufacture of electric equipment. Prom.energ.11 no.9:35-36 S '56. (MLRA 9:11)

1. Zamestitel' nachal'nika Planovogo otdela (for Dubinin) i zamestitel' nachal'nika Tekhnicheskogo upravleniya (for Chusov).

(Electric machinery industry)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ

DUBININ, N.G., kand. tekhn. nauk; TREGUBOV, B.G., inzh.

Basic parameters in upraising with long blastholes. Izv. vys. uchab. zav.; gor. zhur. 6 no.4:3-9 '63. (MIRA 16:7)

1. Institut gornogo dela, Sibirskoye otdeleniye AN SSSR.
(Blasting) (Boring) (Mining engineering)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N. N.

The grader. A textbook for technical schools of mining. Khar'kov, Gos. nauch.-tekhn. izd-vo Ukrainy, 1936. 118 p. (Tekhnicheskii Minimum) (49-55889)

TN816.D8

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N. N.

SHISHOV, Ye.L.; DUBININ, N.N.

Saving time in mining operation cycles. Ugol' 29 no.8:40-43 Ag '54. (MLRA 7:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva.
(Coal mines and mining)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.M., kand.tekhn.nauk; DOROSHENKO, G.N., kand.tekhn.nauk; KOTLYAROVA, A.V., inzh.; KRUGLYAKOVA, M.D., inzh.; VOLOVICH, CHEKHOVSKAYA, T.P., red.izd-va; SHKLYAR, S.Ya., tekhn.red.

[Shaft sinking in the U.S.S.R. and in foreign countries] Opyt prokhodki stvolov shakht v SSSR i za rubezhom. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 257 p. (MIRA 13:11)

1. Kharkov. Ukrainskiy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva.
(Shaft sinking)

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DUBININ, N. P.; ARSENYEVA, M. A.; OLEMBOTSKIY, Ya. L.

"Genetic effect of small doses of ionizing radiation."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva, 31 Aug-9 Sep 64.

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DUBININ, N.P.; DUBININA, L.G.

Relative biological effectiveness of gamma rays as compared with the action of X rays on the human cell nucleus in tissue culture. Radiobiologiia 3 no. 6:833-846 '63. (MIRA 17:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

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DUBININ, M.M., akademik; KADLETS, O.; BOTLIK, I.; ZAVERINA, Ye.D. [deceased]; ZUKAL, A.; SUMETS, B.

Carbon adsorbents with molecular sieve properties. Dokl. AN SSSR 157 no.3:656-659 Jl '64. (MIRA 17:7)

1. Institut fizicheskoy khimii AN Chekhoslovatskoy SSR i Institut fizicheskoy khimii AN SSSR.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

BOGDANOV, Boris Vladimirovich; DUBININ, N.P., inzh., retsenzent; KOCHEROV, F.P., inzh., retsenzent; PENOVA, Ye.M., red.; KOROVENKO, Yu.N., tekhn. red.

[Seagoing and roader barges; design and construction] Morskie i reidovye barzhi; proektirovanie i konstruktsiia. Leningrad, Dudpromgiz, 1963. 294 p. (MIRA 16:5)
(Barges--Design and construction)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

TOROPANOVA, T.A. [deceased]; DUBININ, N.P.

Birds of the forest zone. Report No. 1. Birds of pine, spruce, and hardwood forests in the subzone of mixed forests and southern taiga. Biul.MOIP.Otd.biol. 67 no.5:50-60 S-O '62.

(MIRA 15:10)

(BIRDS) (FOREST FAUNA)

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Some patterns of the distribution of birds in the forest zone.
Ornitologiia no.3:114-121 '60. (MIRA 14:6)
(Birds--Geographical distribution)
(Forest fauna)

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DUBININ, N.P., red.; KHVOSTOVA, V.V., kand. biol. nauk, red.; PCHELINTSEVA, G.M., red.

[Radiation and plant breeding] Radiatsiia i selektsiia rastenii; sbornik statei. Moskva, Atomizdat, 1965. 205 p. (MIRA 18:12)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.

G. Mendel, the founder of genetics. Izv. AN SSSR. Ser. biol. no.6: 809-824 N-D '65. (MIRA 18:11)

1. Laboratoriya radiatsionnoy genetiki Instituta biofiziki AN SSSR.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

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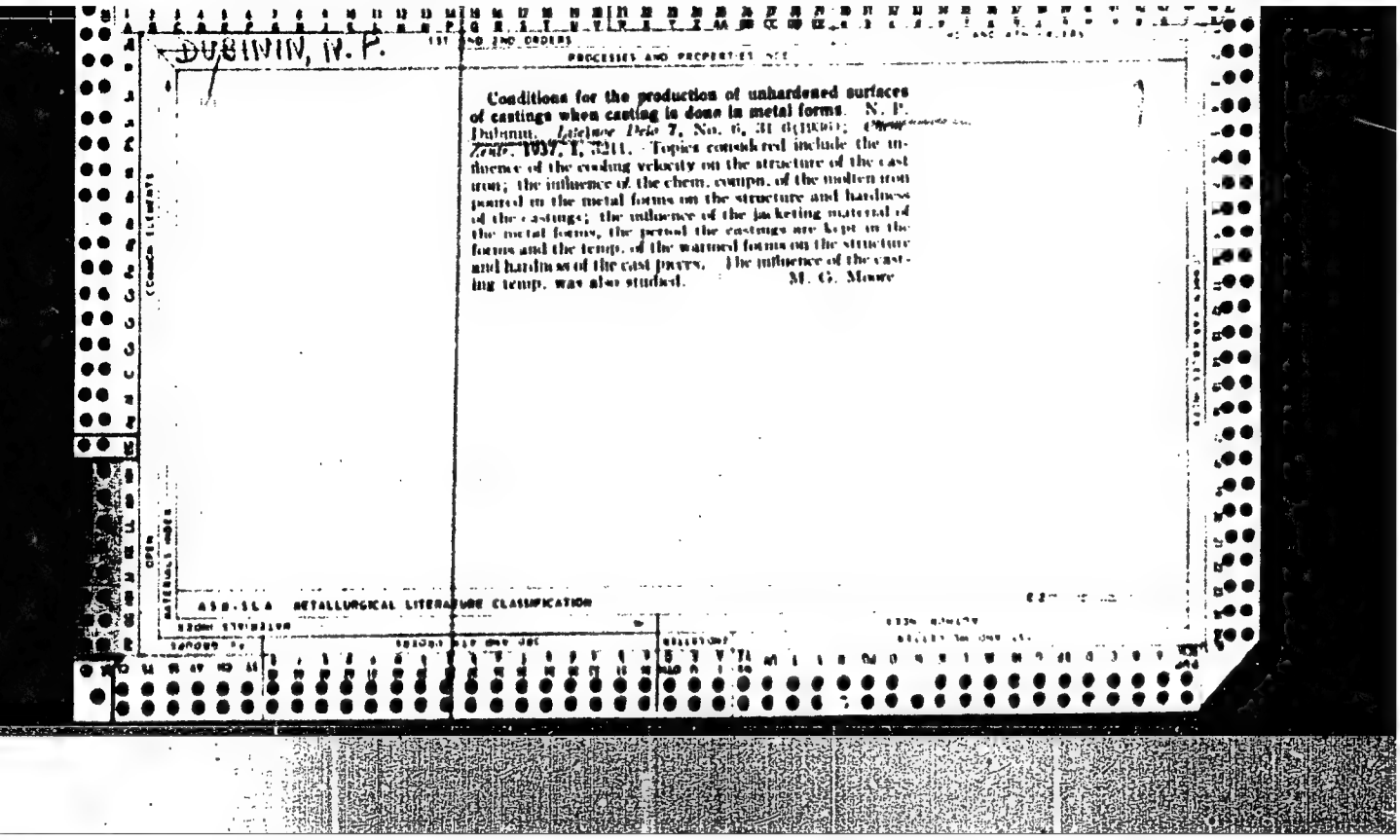

DUBININ, N. P.

PROCESSES AND PROPERTIES

Conditions for the production of unhardened surfaces of castings when casting is done in metal forms. N. P. Dubinin. *Liteinoe Delo* **7**, No. 6, 31 (1936); *Chem. Zentr.* 1937, I, 3211. Topics considered include the influence of the cooling velocity on the structure of the cast iron; the influence of the chem. compn. of the molten iron poured in the metal forms on the structure and hardness of the castings; the influence of the jacketing material of the metal forms, the period the castings are kept in the forms and the temp. of the warmed forms on the structure and hardness of the cast pieces. The influence of the casting temp. was also studied. M. G. Mouw

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

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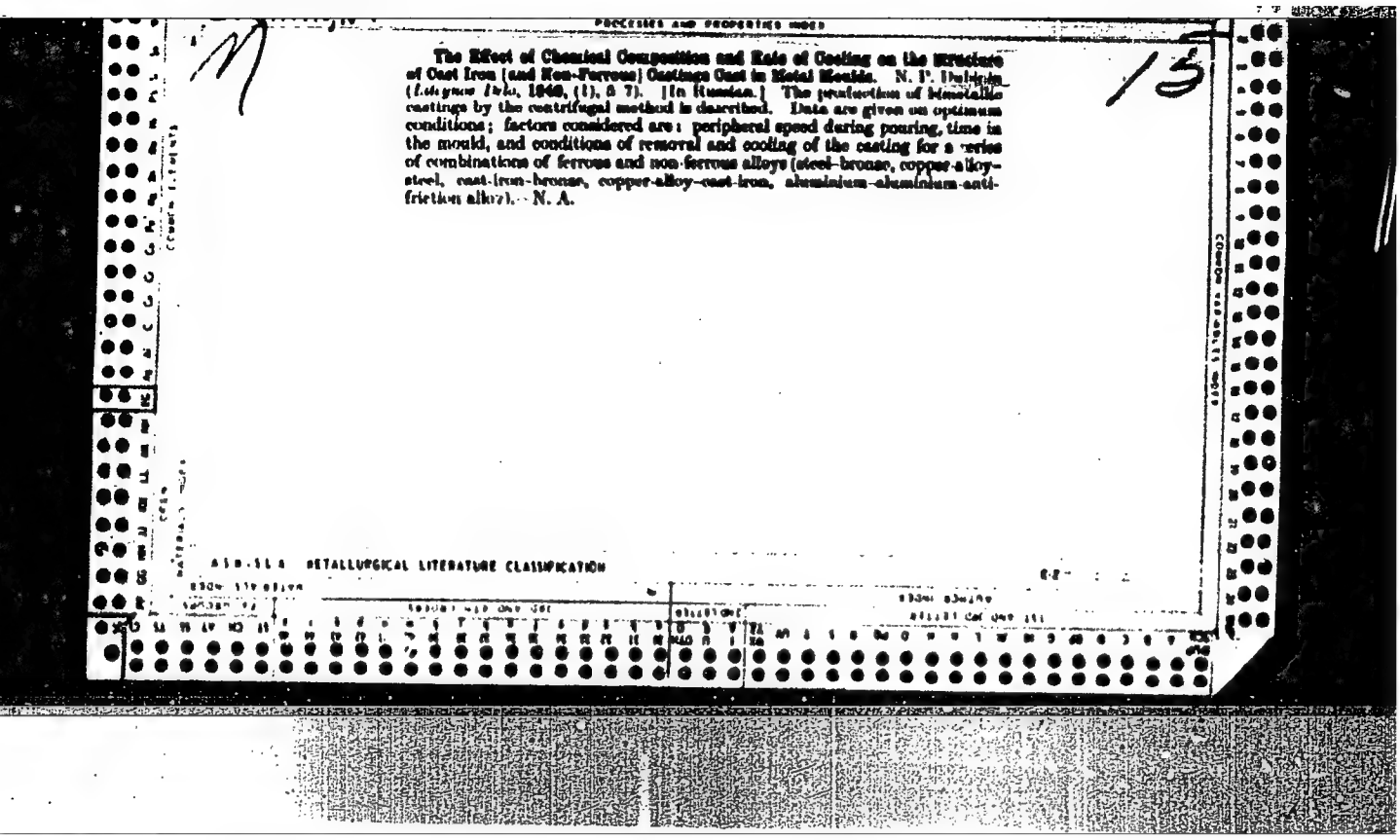

PROCESSES AND PROPERTIES INDEX

The Effect of Chemical Composition and Rate of Cooling on the Structure of Cast Iron [and Non-Ferrous] Castings Cast in Metal Moulds. N. P. Dubinin (*Liteinoe Delo*, 1949, (1), 5–7). [In Russian.] The production of bimetallic castings by the centrifugal method is described. Data are given on optimum conditions; factors considered are: peripheral speed during pouring, time in the mould, and conditions of removal and cooling of the casting for a series of combinations of ferrous and non-ferrous alloys (steel–bronze, copper-alloy–steel, cast-iron–bronze, copper-alloy–cast-iron, aluminium–aluminium-anti-friction alloy).—N. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

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DUBININ, N. P.

Proizvodstvo kokil'nogo chugunnogo lit'ia. Moskva, Mashgiz, 1947. 133 p. illus.

Bibliography: p. 129-131.

Pig iron chill casting.

DLC: TS230.D77

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

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DUBININ, N. P. and M. V. CHUNAEV.

Mekhanizatsiia proizvodstva kokil'nogo lit'ia. Moskva, Mashgiz, 1949. 146 p. illus.

Bibliography: p. (145).

Mechanization of chill casting production.

DLC: TS233.D8

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N. P.

USSR/Engineering - Foundry, Processes Dec 51

"Effect of Preheating Temperature of Metal Mold on Contamination of Castings With Gas Porosity," N. P. Dubinin, Cand Tech Sci, MVTU imeni Bauman

"Litey Proizvod" No 12, pp 26, 27

Establishes evolution of gas from mold metal at high temp as chief cause of gas porosity in castings. Expts were conducted with molds made of steel, cast iron, brass and copper. Each metal has its own optimum temp above which gas evolution increases. Min gas evolution was observed from copper, max - from cast iron.

203T35

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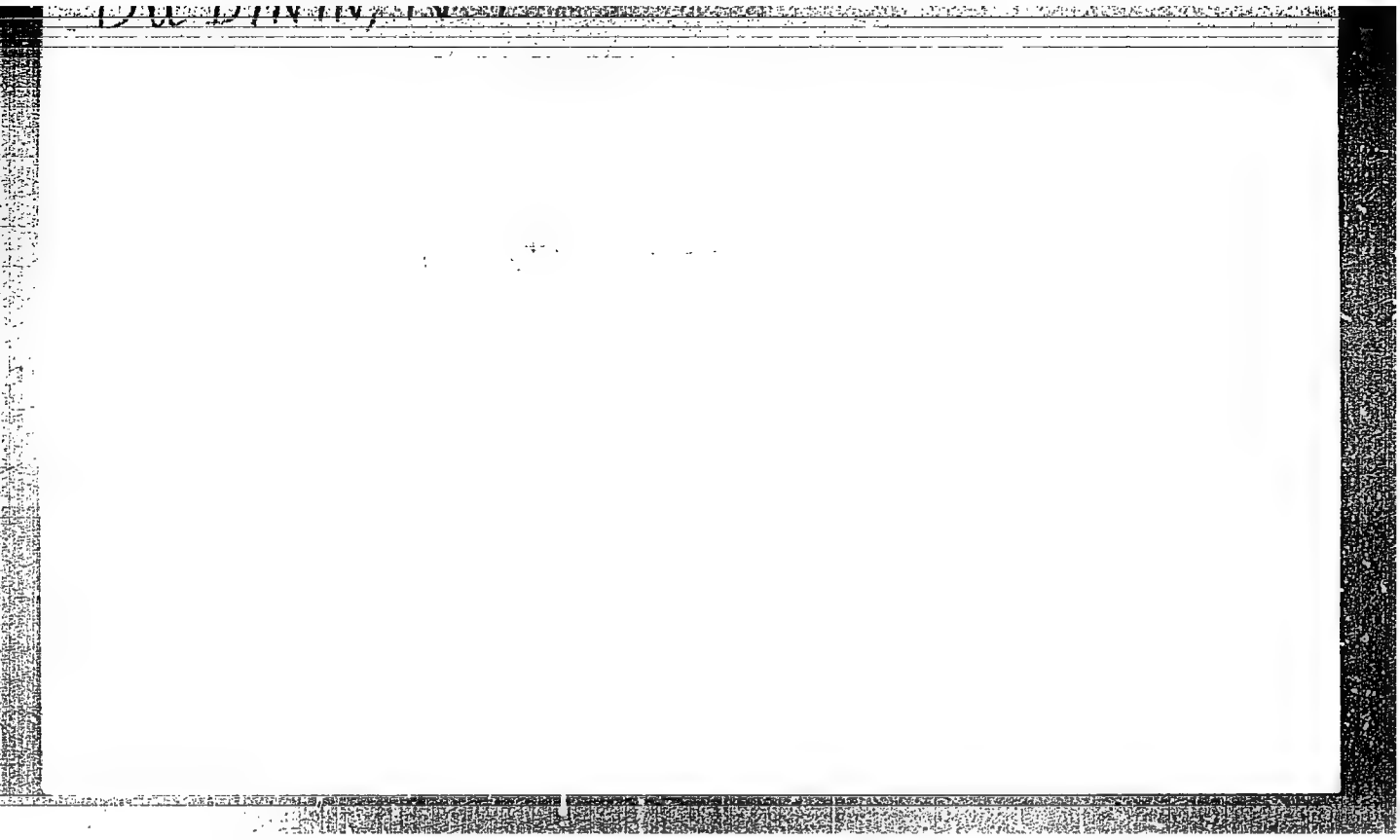

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N. P.

USSR/Metals - Cast Iron, Magnesium Casting Jan 52

"Cast-Iron and Nonferrous Castings," N. P. Dubinin, Cand Tech Sci

"Litey Proizvod" No 1, pp 24-26

Reviews reports presented at All-Union Conference on Permanent Mold Casting including: obtaining cast-iron castings without chilling by regulation of cooling rate and chem compn, regulating depth of chilled zone by admixt of tellurium and graphite, heat-treatment methods for cast-iron permanent mold castings, fabrication of metal molds by dry-sand casting, gas-permeable molds made of metal plates, foundry practice for magnesium alloys.

204T70

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.

ALEKIN, L.Ye.; BALABIN, V.V.; GLADILIN, A.N.; DUBININ, N.P.; KOSYAKOV, K.P. POPOV, L.A.; KHRENOV, A.D.

[The organization of standard workshops for students of the "metal technology" departments of technical colleges] Metodika organizatsii tipovykh uchebnykh masterskikh kafedry "Tekhnologiia metallov" vtuzov. Moskva, Sovetskaia nauka, 1953. 243 p. (MLRA 7:7)

1. Moscow. Moskovskoye vysshoye tekhnicheskoye uchilishche. Kafedra "Tekhnologiya metallov".
(Metalwork--Study and teaching)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N. P.

Dubinin, N. P.

"The Casting of Cast-Iron Machine-Building Parts in Metal Molds." Min Higher Education USSR. Moscow Order of Labor Red Banner Higher Technical School imeni Bauman. Moscow, 1955. (Dissertation for the Degree of Candidate in Biological Science.)

SO: Knizhnaya Letopis'
No. 27, 2 July, 1955

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, M.P.

AID P - 1890

Subject : USSR/Engineering

Card 1/2 Pub. 28 - 2/7

Authors : Dubinin, M. P. and Kane, A. B.

Title : Factory test of a cast-iron crankshaft in the 6-DR-30/50 Diesel

Periodical : Energ. byul., no.4, 10-14, Ap 1955

Abstract : The authors present results of a 1,000 hour test of a specially-made cast-iron crankshaft for the 6-DR-30/50, 6 cylinder, 300 mm bore, 500 mm stroke, 600 HP, 300 rpm engine under various conditions to determine the strength and wearability of this type of crankshaft in comparison with the regular steel crankshaft. The performance was found satisfactory, and now the cast-iron crankshafts of this type are being given a final test on ships at sea. Five diagrams and 9 tables.

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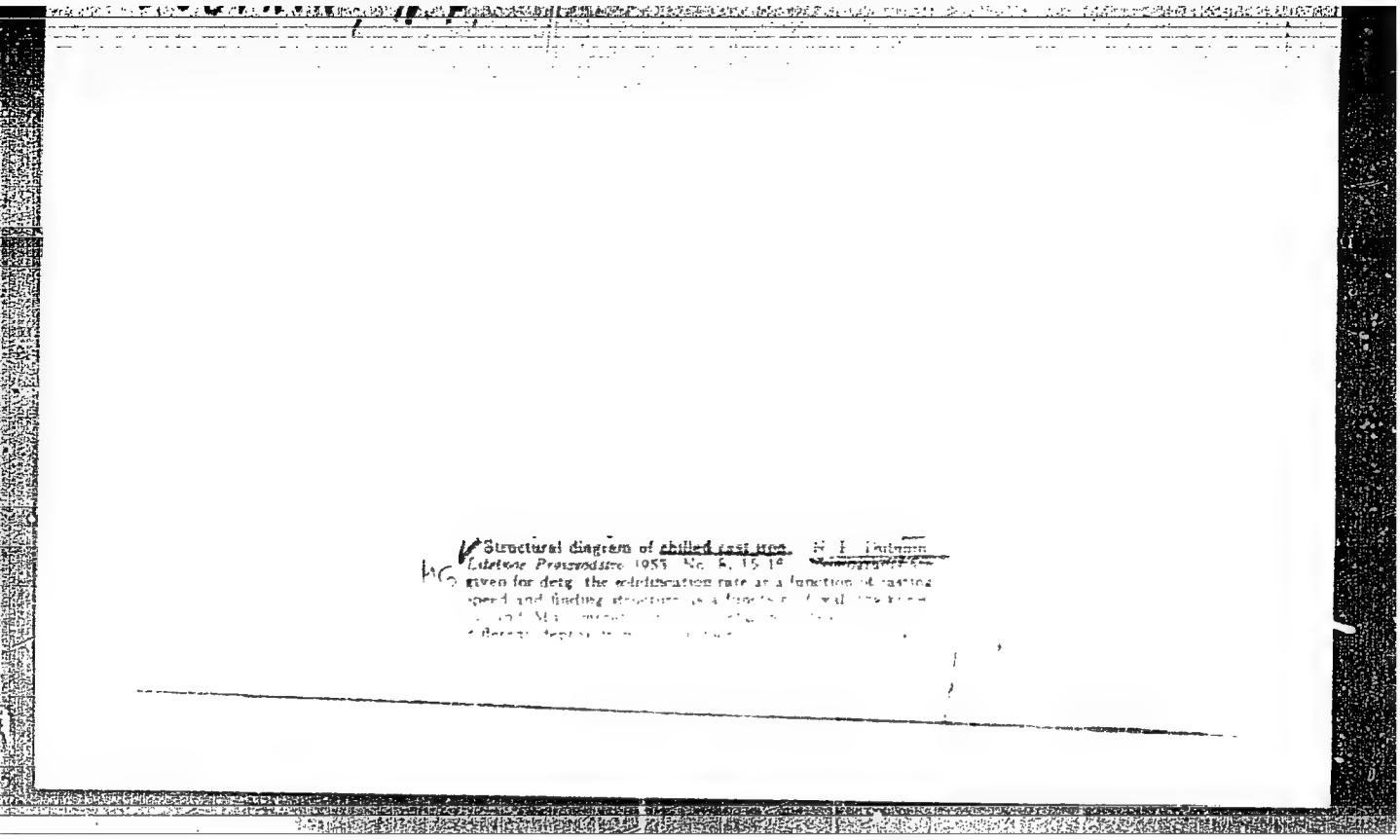

Structural diagram of chilled cast iron. N. I. Ingham
Literne Proizvodstvo 1955 No. 5, 15-16
Given for determining the solidification rate as a function of casting speed and finding structure as a function of wall thickness.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P., kandidat tekhnicheskikh nauk.

Calculating the shrinkage of an iron casting made in a metallic mold and shrinkage effect on quality of the casting. [Trudy] MVTU no.45:129-143 '55. (MLRA 10:6)
(Iron founding)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P., kandidat tekhnicheskikh nauk; VOKIN, G.F., inzhener.

Producing magnesium modified cast iron with a minimum of pyrophoric effect and some problems of production technology. [Trudy] MVTU no.45:154-164 '55. (MLRA 10:6)

(Iron-magnesium alloys)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, Nikolay Petrovich; SOKOLOV, N.A., inzhener, retsenzent; CHERNYSHEV, I.A., kandidat tekhnicheskikhnauk, redaktor; KRYLOV, V.I., inzhener, redaktor izdatel'stva; SOKOLOVA, T.F., tekhnicheskiy redaktor

[Cast-iron founding in metal forms] Chugunnoe lit'e v metallicheskikh formakh. Izd. 2-oe, perer. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 319 p. (MIRA 9:9)
(Founding)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.

GLADILIN, Anatliy Nikolayevich, kandidat tekhnicheskikh nauk; DUBININ, Nikolay Petrovich, kandidat tekhnicheskikh nauk; ZHEVTUNOV, Petr Prokhorovich, kandidat tekhnicheskikh nauk; KRASAVIN, Vasiliy Stepanovich, kandidat tekhnicheskikh nauk; NAZAROV, Sergey Tikhonovich, kandidat tekhnicheskikh nauk; PANCHENKO, Konstantin Petrovich, kandidat tekhnicheskikh nauk; POPOV, Viktor Aleksandrovich, kandidat tekhnicheskikh nauk; POPOV, Yevgeniy Aleksandrovich, kandidat tekhnicheskikh nauk; RASTORGUYEV, Ivan Sergeyevich, kandidat tekhnicheskikh nauk; STOROZHEV, Mikhail Vasil'yevich, kandidat tekhnicheskikh nauk; KONSTANTINOV, L.S., kandidat tekhnicheskikh nauk, redaktor; ROZENBERG, G.A., kandidat tekhnicheskikh nauk, redaktor; MODEL', B.I., tekhnicheskiy redaktor

[Technology of metals] Tekhnologiia metallov. Pod red. N.P.Dubinina. Izd. 2-oe. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 550 p. (MLRA 9:8)

1. Prepodavateli Moskovskogo Vyschego tekhnicheskogo uchilishcha im. Baumana (for Gladilin, Dubinin, Zhevtunov, Krasavin, Nazarov, Panchenko, Popov, V.A., Popov, Ye.A., Rastorguyev, Storozhev)
(Metallurgy) (Metalwork)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

Name: DUBININ, Nikolay Petrovich

Dissertation: Casting of machine-building pig-iron parts in metallic forms

Degree: Doc Tech Sci

Affiliation: [not indicated]

Defense Date, Place: 14 Nov 55, Council of Moscow Order of Lenin and Order of Labor Red Banner Higher Tech School imeni Bauman

Certification Date: 29 Jun 57

Source: BMVO 18/57

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

PHASE I BOOK EXPLOITATION 1155

Dubinin, Nikolay Petrovich; Gladilin, Anatoliy Nikolayevich; Zhevtunov, Petr Prokhorovich; Krasavin, Vasiliy Stepanovich; Nazarov, Sergey Tikhonovich; Panchenko, Konstantin Petrovich; Popov, Viktor Aleksandrovich; Popov, Yevgeniy Aleksandrovich; Rastorguyev, Ivan Sergeyevich (Deceased); Storozhev, Mikhail Vasil'yevich

Tekhnologiya metallov (Technology of Metals) 3d ed., Moscow, Mashgiz, 1958. 564 p. 25,001 copies printed.

Ed.: Dubinin, N.P., Candidate of Technical Sciences; Ed. of Publishing House: Shemshurina, Ye.A.; Tech. Eds: Uvarova, A.F. and Model', B.I.; Managing Ed. for Literature on Metal Working and Tool Making (Mashgiz): Beyzel'man, R.D., Engineer.

PURPOSE: This is a textbook for students taking courses in machine design and manufacture at vtuzes.

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APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

COVERAGE: The book contains data on the structure and properties of metals and alloys, on nonmetallic materials, on methods of forming metals and alloys (casting, forging, stamping), on methods of machining metals and working nonmetallic materials, and on all types of metal-processing equipment. Authorship of the book is as follows: Part I, N.P. Dubinin; Part II, P.P. Zhevtunov; Part III, N.P. Dubinin; Part IV, M.V. Storozhev and Ye.A. Popov; Part V, S.T. Nazarov; Part VI, K.P. Panchenko, V.S. Krasavin, and A.N. Gladilin; Part VII, I.S. Rastogruyev (deceased) and V.A. Popov. All authors are Candidates of Technical Sciences, with the possible exception of Ye.A. Popov.

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28(1); 25(1) PHASE I BOOK EXPLOITATION SOV/3211

Dubinin, Nikolay Petrovich

Mekhanizatsiya i avtomatizatsiya lit'ya v metallicheskiye formy (Mechanization and Automation of Permanent-mold Casting) Moscow, Mashgiz, 1959. 395 p. 7,000 copies printed.

Ed.: S. T. Yudin, Engineer; Ed. of Publishing House: G. N. Soboleva; Tech. Ed.: V. D. El'kind; Managing Ed. for Literature on Heavy Machine Building: S. Ya. Golovin, Engineer.

PURPOSE: This book is intended for designers, scientific workers, plant personnel, and students of schools of higher technical education specializing in machine building.

COVERAGE: The book deals with the basic principles of the construction of machinery used in permanent-mold casting. Design sequences are presented for automatic and semi-automatic equipment and for the mechanization and automation of sand-core making for semi-permanent-mold casting. V. I. Krylov wrote Chapter VII. There

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are 66 references: 61 Soviet, 4 English, and 1 French.

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Automated shop at the Ul'yanovskiy zavod (Ul'yanovsk Plant) for the production of ENIMS pistons 388

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

18(5). SOV/128-59-3-11/31

AUTHOR: Dubinin, N.P., Doctor of Technical Sciences

TITLE: Technical and Economic Indices of Pig Iron Die Casting

PERIODICAL: Liteynoye Proizvodstvo,1959, Nr 3, pp 22-23 (USSR)

ABSTRACT: After quoting several data on prices for various types of molds according to the standards of the plan GOSPLAN the author evaluates the profit of the various methods of pouring of cast-iron. Casting by metal molds is profitable only for series and mass production. But die casting might be profitable already for certain shapes with thin walls, e.g. radiators. Profitableness of die castings depends very much too on the precision of the die production. According to the Plan [GOSPLAN] die casting (inclusive centrifugal casting) shall amount to 493.000 tons in 1965. The author publishes data about the amount of production by means of die casting achieved at different plants in Russia. Abroad too a tendency to increase the die casting production can be

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Technical and Economic Indices of Pig Iron Die Casting

observed. (Data are included about this tendenca in the USA, in England, and in the GDR). A table shows the production costs for metal dies and their weight. The disadvantages of the die casting method are listed. Nevertheless, the die casting method is cheaper. At the same time this method will save space within the foundry. Three references are given, of which 1 is Soviet, 1 English and 1 SZG.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P., inzh.

Field method of kilning brick in China. Stroi. mat. 5 no.4:39 Ap '59. (MIRA 12:6)
(China--Brickmaking)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, Nikolay Petrovich; YUDIN, S.T., inzh., red.; SOBOLEVA, G.N., red.izd-va; EL'KIND, V.D., tekhn.red.

[Introducing machinery and automatic control to the process of permanent mold casting] Mekhanizatsiia i avtomatizatsiia lit'ia v metallicheskie formy. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 395 p. (MIRA 12:11)
(Die casting--Equipment and supplies) (Automatic control)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, Nikolay Petrovich, kand.tekhn.nauk; ZHEVTUNOV, Petr Prokhorovich, kand.tekhn.nauk; STOROZHEV, Mikhail Vasil'yevich, kand.tekhn.nauk; POPOV, Yevgeniy Aleksandrovich, kand.tekhn.nauk; NAZAROV, Sergey Tikhonovich, kand.tekhn.nauk; GLADILIN, Anatoliy Nikolayevich, kand.tekhn.nauk; KRASAVIN, Vasiliy Stepanovich, kand.tekhn.nauk; PANCHENKO, Konstantin Petrovich, kand.tekhn.nauk; POPOV, Viktor Aleksandrovich, kand.tekhn.nauk; RASTORGUYEV, Ivan Sergeyevich, kand.tekhn.nauk [deceased]; SHEMSHURINA, Ye.A., red.izd-va; UVAROVA, A.F., tekhn.red.; MODEL', B.I., tekhn.red.

[Technology of metals] Tekhnologiia metallov. Pod red. N.P. Dubinina. Izd.3. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1959. 564 p. (MIRA 13:7)

1. Prepodavateli Moskovskogo vysshego tekhnicheskogo uchilishcha imeni N.Ye.Baumana (for all except Shemshurina, Uvarova, Model').
(Metals) (Metalwork)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

18(5) SOV/128-59-6-24/25

AUTHOR: Dubinin, N.P., Doctor of Technical Sciences

TITLE: Chinese Cupola Furnaces

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 6, p 47 (USSR)

ABSTRACT: For 2,500 years there have been cupola furnaces in China with a capacity from 100 up to 800 kg/hrs, which have a number of advantages with regard to simple design, simple maintenance, and simple construction. There follow several drawings showing the construction and the function of a Chinese cupola furnace. One electric motor of 1 Kilowatt injects the air. The author has seen this type of cupola furnace at the Institute of Polytechnics at Wuchan. This Chinese cupola furnace is suggested for repair shops, for medium and large size agricultural co-operative societies, and for installations not needing large amounts of metal. There are 10 diagrams

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BOGACHEV, I.N.; DUBININ, N.P.; YEGORENKOV, I.P.; ZHUKOV, A.A.; IVANOV,B.G.; IVANOV, D.P.; MARIYENBAKH, L.M., doktor tekhn. nauk, prof.; MINAYEV, I.M.; ROZENFEL'D, S.Ye.; SIDEL'NIKOV, S.V.; SOSNENKO, M.N.; YUKALOV, I.N.; YUDIN, S.B.; RUBTSOV, N.N., doktor tekhn. nauk, prof., red.; CHERNYAK, O.V., inzh., red. izd-va; MODEL', B.I., tekhn. red.

[Founding handbook; iron founding] Spravochnik liteishchika; chugunnoe lit'e. Pod obshchei red. N.N.Rubtsova. Moskva, Mashgiz, 1961. 774 p. (MIRA 14:12)

(Iron founding)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

PHASE I BOOK EXPLOITATION SOV/5751

Dubinin, N.P., Professor, Doctor of Technical Sciences, ed.

Stal'noye lit'ye; spravochnik dlya masterov liteynogo proizvodstva (Steel Casting; Foundry Foreman's Handbook) Moscow, Mashgiz, 1961. 887 p. Errata slip inserted. 15,000 copies printed.

Compilers: R.G. Aleksandrov, Ye.G. Barbashina, K.P. Bas'ko, A.S. Vartan'yan, P.F. Vasilevskiy, L.A. Glagoleva, N.P. Dubinin, L.S. Konstantinov, A.I. Korotkov, V.L. Lesnichenko, Ye.A. Panfilov, N.A. Trubitsyn, N.M. Tuchkevich, A.D. Fadeyev, and G.F. Fokin; Ed.: S.L. Martens, Engineer; Tech. Ed.: T.F. Sokolova; Managing Ed. for Literature on the Hot Working of Metals: S. Ya. Golovin, Engineer.

PURPOSE: This handbook is intended for foremen of foundries.

COVERAGE: The handbook contains concise information on the structures, properties, and uses of various types of steel. Attention is also given to the properties and uses of molding and charge materials, methods of making molds and cores, casting processes, filling of molds, shaking out and cleaning of castings, and the heat treatment of castings. Special casting methods such

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as permanent-mold casting, centrifugal casting, investment casting, and shell-mold casting are also discussed. In addition, the handbook indicates casting defects occurring when various casting methods are applied, and outlines methods for removing these defects. Brief information is given on the organization and economics of steel-casting production. No personalities are mentioned. References, mostly Soviet, follow each chapter.

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DUBININ, N.P.; BARINOV, N.A.; FOKIN, G.F.; TIMONICH, D.D.; IVANOV, V.I.

Practice of preparing highly resistant cast iron in basic cupola furnaces. Lit. proizv. no. 4:41-42 Ap '61. (MIRA 14:4)
(Cast iron—Metallurgy) (Cupola furnaces)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.; KOMISSAROV, V.A.; Prinimal uchastiye KOGAN, L.B., inzh.

Method of calulating forces needed for opening shells and extracting metal cores. Lit. proizv. no.1:22-25 Ja '62. (MIRA 16:8)

(Shell molding (Founding) (Coremaking)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P., doktor tekhn.nauk, prof.

Automatic control of pouring into metal molds. Izv.vys.ucheb. zav.; mashinostr. no.9:85-97 '62. (MIRA 16:2)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.

(Founding) (Automatic control)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P., prof.; KOSYAKOV, K.P., inzh.

Automatic gating mechanisms for chill-casting machines. Izv.vys. ucheb.zav.; mashinostr. no.9:149-158 '62. (MIRA 16:2)

1. Moskovskoye vysshcye tekhnicheskoye uchilishche imeni Baumana.

(Foundries--Equipment and supplies)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P., doktor tekhn.nauk,prof.; KOMISSAROV, V.A., inzh.;
VYAZOV, A.F., inzh.

New technological experiment for the development of chill casting with the use of metal cores. Izv.vys.ucheb. zav.;mashinostr. no. 12: 203-209 '63. (MIRA 17:9)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche iemni Baumana.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N. P.; KOMISSAROV, V. A.

"Balance of forces acting between casting, mould, and cores."

report submitted for 31st Intl Foundry Cong, Amsterdam, 21-25 Sep 64.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

ZHAROV, N.T.; DUBININ, N.P., doktor tekhn. nauk, prof., retsenzent; POLOVINKIN, P.I., dots., retsenzent; CHERNIN, E.A., inzh., retsenzent; ZHESTKOVA,I.N.,inzh.,red.

[Automation of certain foundry processes] Avtomatizatsiia nekotorykh liteinykh protsessov. Moskva, Mashinostroenie, 1964. 278 p. (MIRA 18:1)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.; KOMISSAROV, V.A.

Crack resistance of grey cast iron castings. Lit. proizv. 5: 32-33 My '64. (MIRA 18:3)

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DUBININ, N.P.

Current problems of radiation genetics. Radiobiologiia 4 no.6:801-803 '64.
(MIRA 18:7)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.; DUBININA, L.G.

Genetic effect of low radiation doses and the problems of chemical radioprotection. Radiobiologia 4 no.6:854-861 '64. (MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.; SHCHERBAKOV, V.K.

Radioprotective compounds as mutagens and antimutagens. Radiobiologiia 4 no.6:862-864 '64. (MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUB[illegible], N.I.

Achievements in genetics in the service of agriculture. Genetika no.1:50-66 '65. (MIRA 18:10)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.

Centennial of the discovery of heredity laws by G.Mendel.
Biofizika 10 no.5:721-722 '65. (MIRA 18:10)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.; SHCHERBAKOV, V.K.; MOKEYEVA, N.P.

Cytogenetic analysis of the mutagenic effect of chemical mutagens of a new group and some characteristics of natural and induced mutation of chromosomes. Genetika no.2:67-72 Ag '65. (MIRA 18:10)

1. Institute of Biological Physics, Academy of Sciences of the U.S.S.R., Moscow.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P.; SHCHERBAKOV, V.K.; KESLER, G.N.

Phases of a cell cycle and the mutagenic effect of alkylating compounds. Genetika no.2:73-86 Ag '65. (MIRA 18:10)

1. Institute of Biological Physics, Academy of Sciences of the U.S.S.R., Moscow.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9

DUBININ, N.P., doktor tekhn. nauk; KOSYAKOV, K.P., inzh.

Design diagrams and calculation of gravity die casting machine guides. Lit. proizv. no.11:21-25 N '65.
(MIRA 18:12)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411320010-9"